FIG. 1

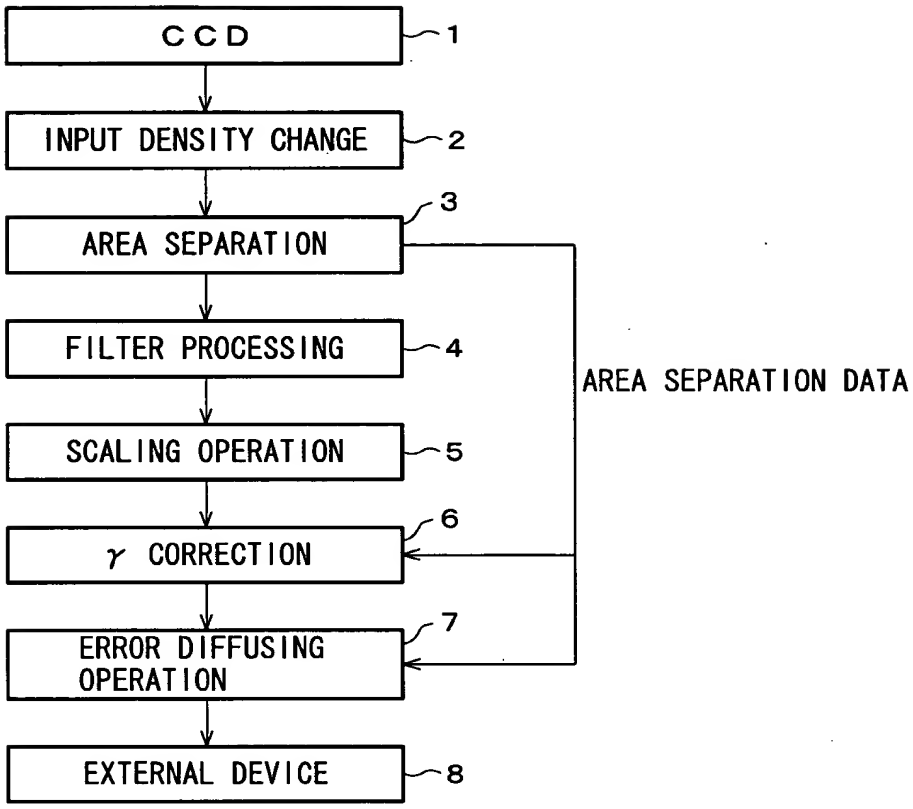

CCD
1
INPUT DENSITY CHANGE
2
AREA SEPARATION
3
FILTER PROCESSING
4
SCALING OPERATION
5
γ CORRECTION
6
ERROR DIFFUSING OPERATION
7
EXTERNAL DEVICE
8
AREA SEPARATION DATA

FIG. 2

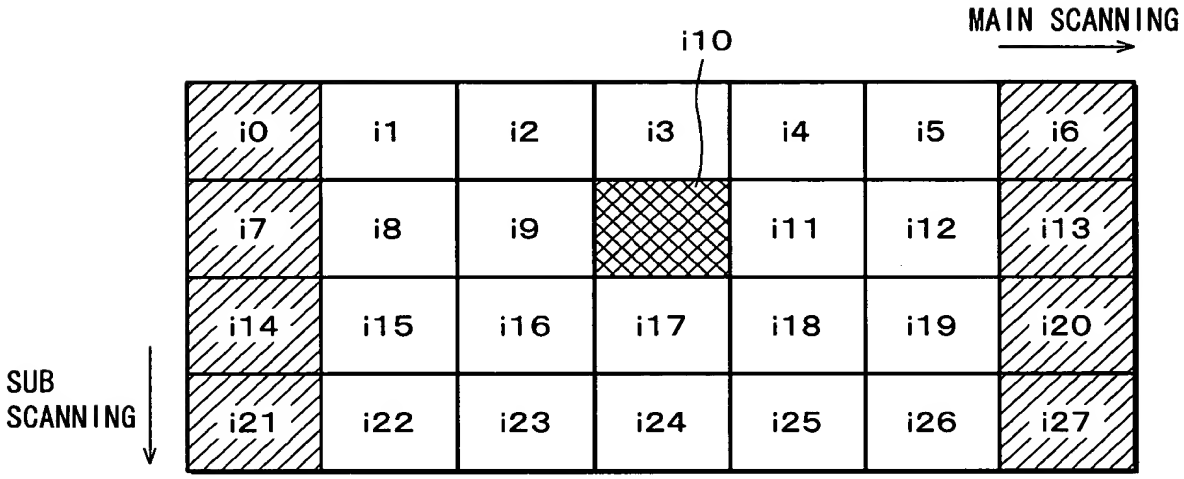

MAIN SCANNING
i10
i0
i1
i2
i3
i4
i5
i6
i7
i8
i9
i11
i12
i13
i14
i15
i16
i17
i18
i19
i20
i21
i22
i23
i24
i25
i26
i27
SUB SCANNING

FIG. 3

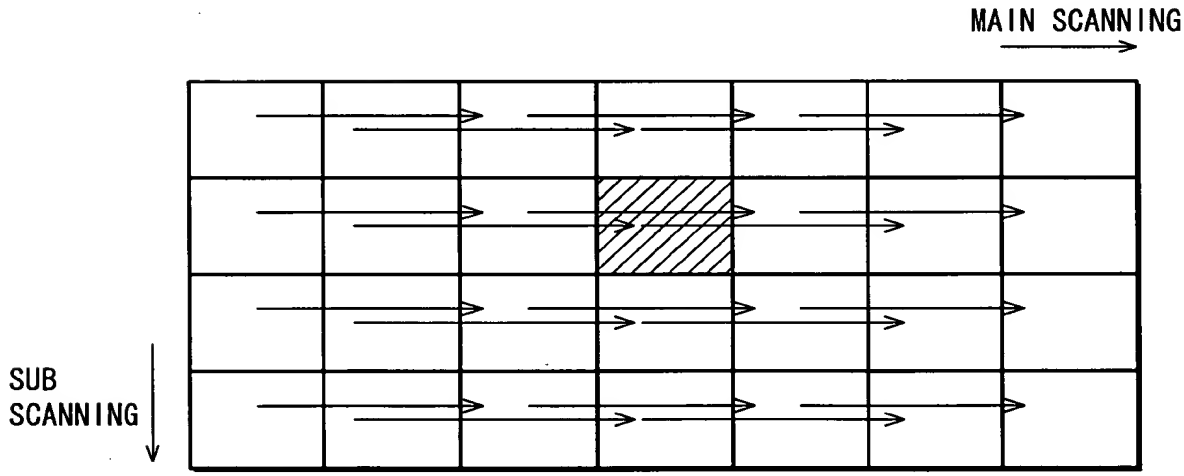
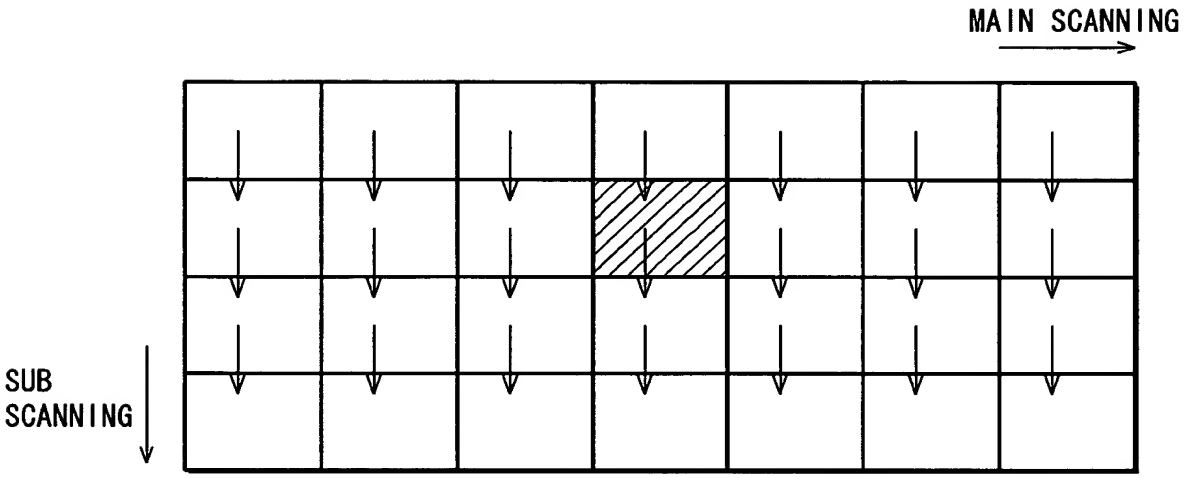

MAIN SCANNING
SUB SCANNING

FIG. 4



0 0 0

FIG. 5

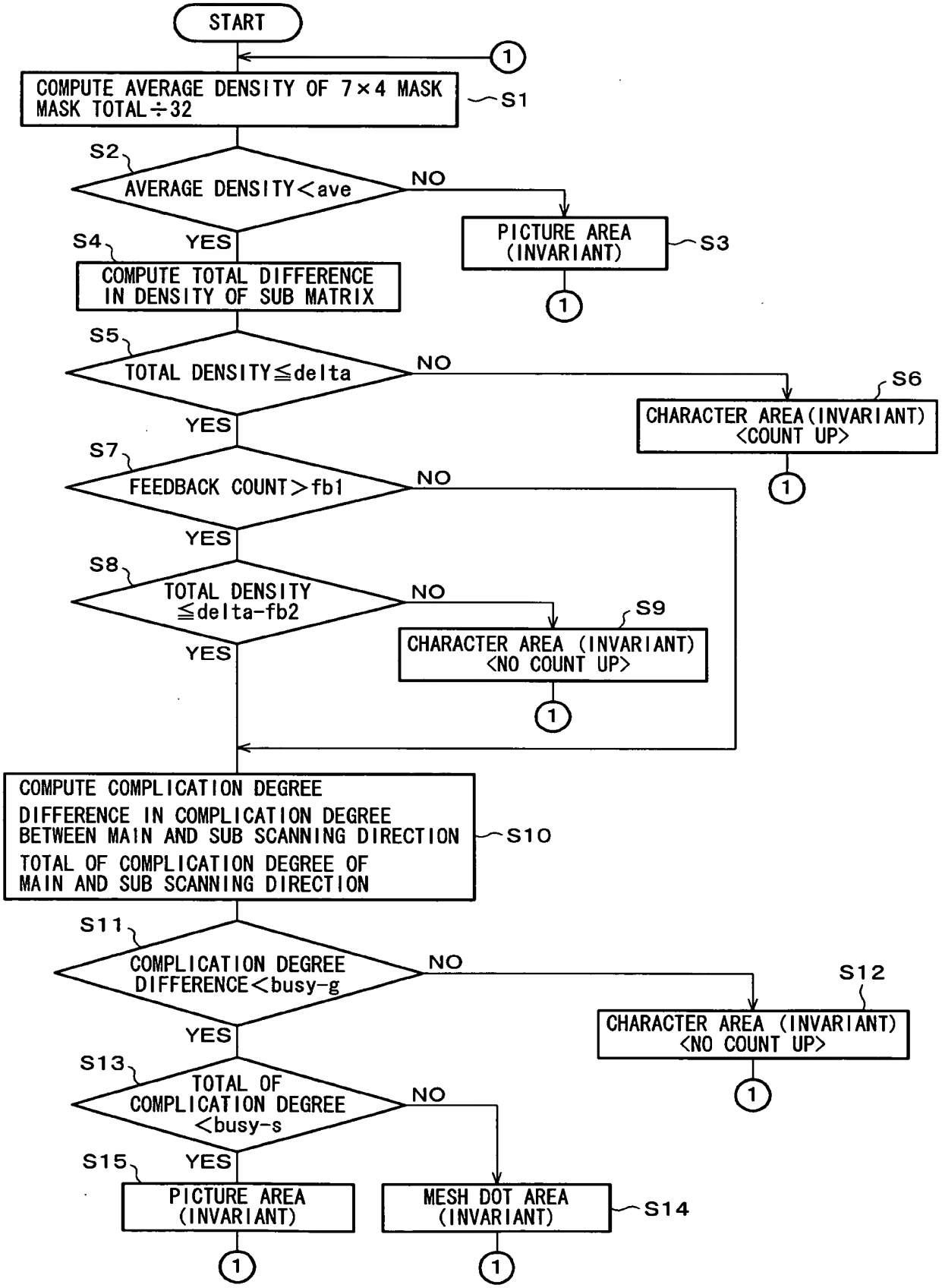

START
1
COMPUTE AVERAGE DENSITY OF 7×4 MASK
MASK TOTAL÷32
S1
S2
AVERAGE DENSITY<ave
NO
PICTURE AREA
(INVARIANT)
S3
YES
S4
COMPUTE TOTAL DIFFERENCE
IN DENSITY OF SUB MATRIX
S5
TOTAL DENSITY≦delta
NO
S6
CHARACTER AREA (INVARIANT)
<COUNT UP>
YES
S7
FEEDBACK COUNT>fb1
NO
YES
S8
TOTAL DENSITY
≦delta-fb2
NO
S9
CHARACTER AREA (INVARIANT)
<NO COUNT UP>
YES
COMPUTE COMPLICATION DEGREE
DIFFERENCE IN COMPLICATION DEGREE
BETWEEN MAIN AND SUB SCANNING DIRECTION
TOTAL OF COMPLICATION DEGREE OF
MAIN AND SUB SCANNING DIRECTION
S10
S11
COMPLICATION DEGREE
DIFFERENCE<busy-g
NO
S12
CHARACTER AREA (INVARIANT)
<NO COUNT UP>
YES
S13
TOTAL OF
COMPLICATION DEGREE
<busy-s
NO
S15
YES
PICTURE AREA
(INVARIANT)
MESH DOT AREA
(INVARIANT)
S14

FIG. 6

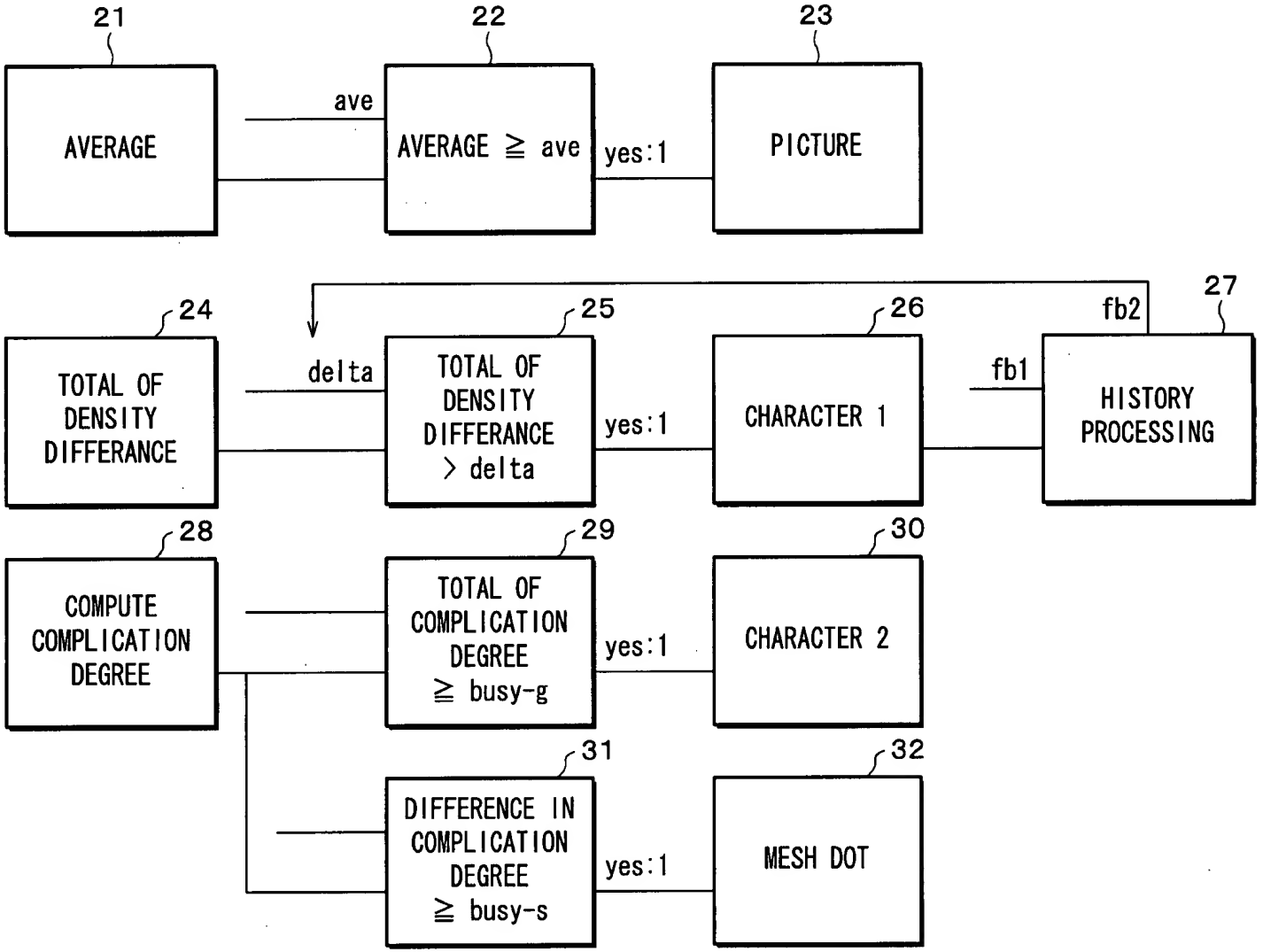

21
AVERAGE
ave
22
AVERAGE ≧ ave
yes:1
23
PICTURE
24
TOTAL OF DENSITY DIFFERANCE
delta
25
TOTAL OF DENSITY DIFFERANCE > delta
yes:1
26
CHARACTER 1
fb1
fb2
27
HISTORY PROCESSING
28
COMPUTE COMPLICATION DEGREE
29
TOTAL OF COMPLICATION DEGREE ≧ busy-g
yes:1
30
CHARACTER 2
31
DIFFERENCE IN COMPLICATION DEGREE ≧ busy-s
yes:1
32
MESH DOT

FIG. 7

PICTURE	CHARACTER 1	CHARACTER 2	MESH DOT	AREA SETTING
0	0	0	0	0
0	0	0	1	2
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	0
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

FIG. 8

0	0	0	0	0
0	0	1	0	0
0	0	0	0	0
0	0	0	0	0

FIG. 9

−1	−1	−1	−1	−1
−1	−1	50	−1	−1
−1	−1	−1	−1	−1
−1	−1	−1	−1	−1

FIG. 10

−1	−1	5	−1	−1
1	3	50	3	1
−1	−1	3	−1	−1
−1	−1	1	−1	−1

0 5 0 6 4 2 0 5 0 6 4 2 0 5 0 6 4 2

FIG. 11

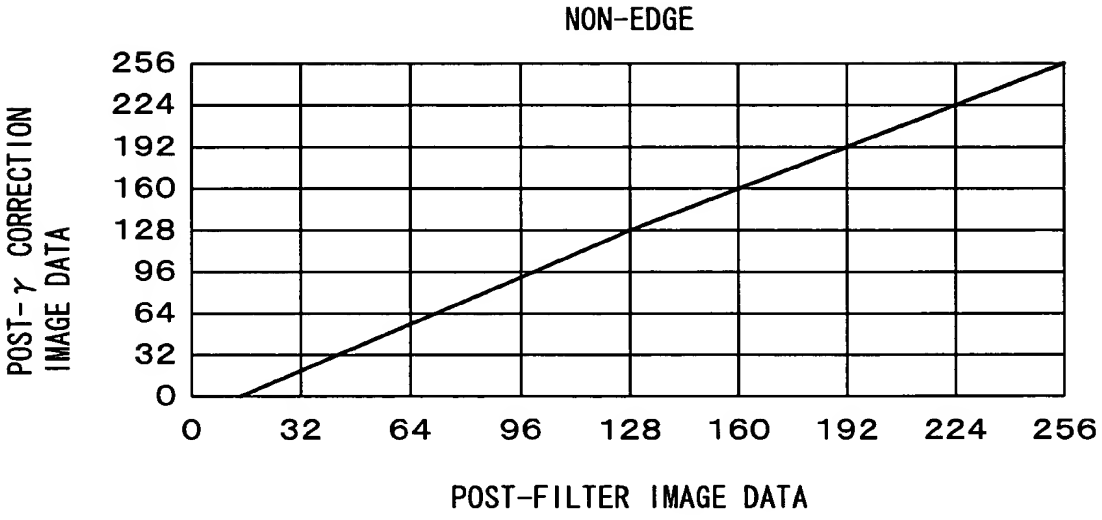

NON-EDGE
POST-γ CORRECTION IMAGE DATA
256
224
192
160
128
96
64
32
0
0
32
64
96
128
160
192
224
256
POST-FILTER IMAGE DATA

FIG. 12

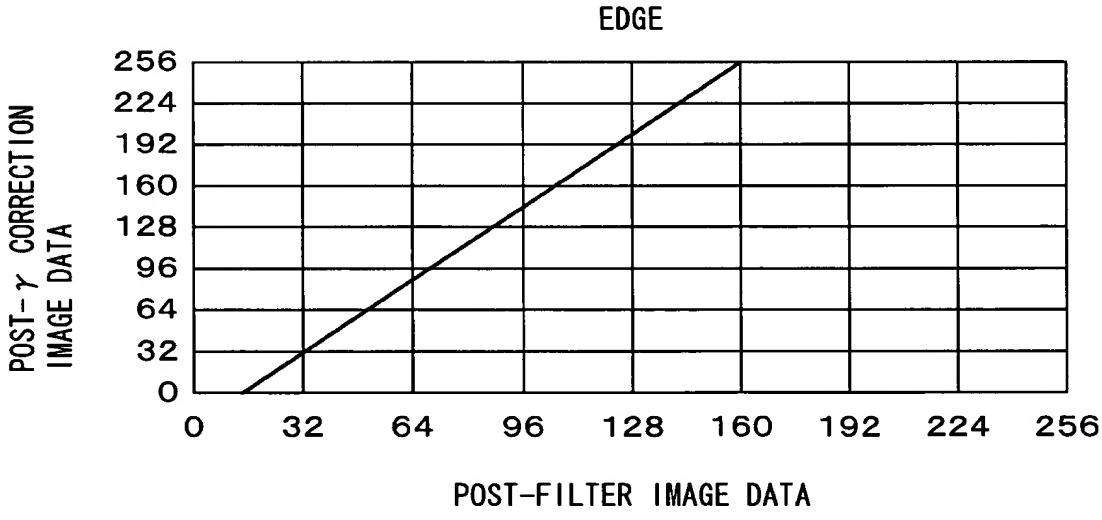

EDGE
POST-γ CORRECTION IMAGE DATA
256
224
192
160
128
96
64
32
0
0
32
64
96
128
160
192
224
256
POST-FILTER IMAGE DATA

FIG. 13

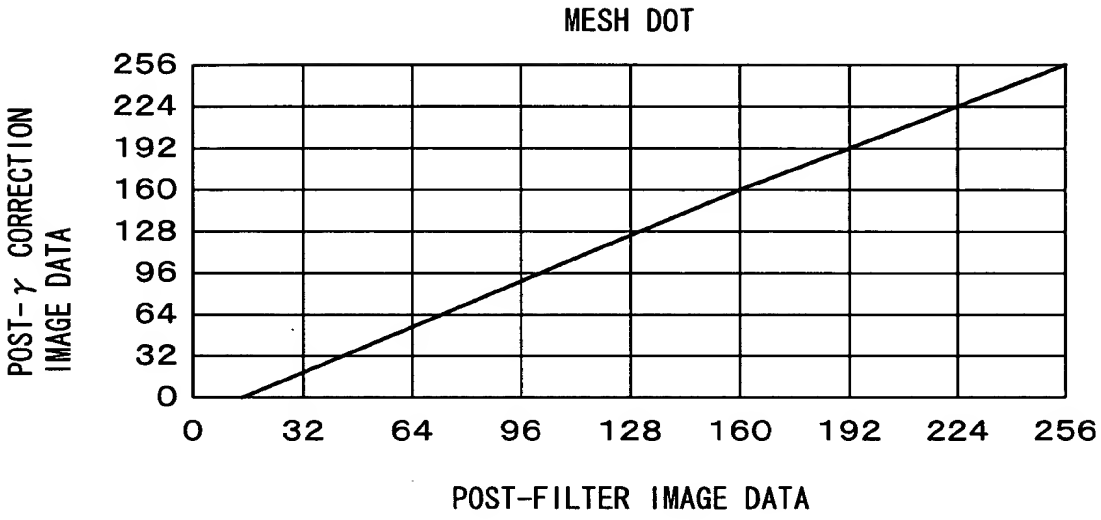


FIG. 14

	p	a
b	c	d